



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,518	12/05/2003	Seiji Yamashita	21581-00260-US1	7822

30678 7590 10/06/2005

CONNOLLY BOVE LODGE & HUTZ LLP
SUITE 800
1990 M STREET NW
WASHINGTON, DC 20036-3425

EXAMINER

DELCOTTO, GREGORY R

ART UNIT	PAPER NUMBER
----------	--------------

1751

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/727,518

Applicant(s)

YAMASHITA ET AL.

Examiner

Gregory R. Del Cotto

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9 and 11-21 is/are pending in the application.
- 4a) Of the above claim(s) 15-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/819,769.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 9 and 11-21 are pending. Claim 10 has been canceled. Applicant's arguments and amendments filed 7/22/05 have been entered.

Claims 15-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 2/15/05.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/819769, filed on 3/29/01.

Objections/Rejections Withdrawn

The following objections/rejections set forth in the Office action mailed 5/3/05 have been withdrawn:

The rejection of claims 9-14 under 35 U.S.C. 112, second paragraph, has been withdrawn.

The rejection of claims 9-13 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 043,963 has been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1751

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over over EP 043,963.

'963 teaches a process for the preparation of stable, nonionic surface active agents which comprises in a first stage, reacting ethylene oxide with a primary monohydric alcohol having a range of chain lengths containing 10 to 20 carbon atoms in the presence of an acid catalyst for the time necessary to obtain an adduct containing 1 to 6 moles of ethylene oxide and then in a second stage, reacting ethylene oxide with neutralized and washed reaction product from the first stage in the presence of an alkaline catalyst for the time necessary to prepare a stable, liquid nonionic surface active agent. See Abstract. The acid catalyst used in the first stage of the process conveniently can be one of the well known class of the catalysts such as the fluorides and chlorides of boron, aluminum, iron, tin, and titanium, and complexes of such halides with ethyl ether. Sulfuric acid and phosphoric acid also are effective. See page 5, lines 10-30. The alcoholate can be made in situ by reacting the residue from the first-stage

Art Unit: 1751

reaction with a powdered caustic alkali. See page 6, lines 25-30. Suitable caustic alkali includes potassium hydroxide, etc. See Example 1. Note that, with respect to the clause "obtainable...", in claim 9, for purposes of examination, this clause is simply treated as an example of a manner in which to produce an aliphatic alcohol alkylene oxide adduct and is not a patentable limitation. Additionally, the Examiner asserts that the alkylene oxide adduct as taught by '963 would have the same distribution constant as recited by the instant claims because '963 teaches making an adduct in the same way as recited by the instant claims. Furthermore, the Examiner asserts that the teaching of sulfuric acid or phosphoric acid by '963 would suggest salts of these acids as recited by the instant claims since one skilled in the art would have a reasonable expectation of success to use the salts of the acids in the process taught by '963.

'963 does not teach, with sufficient specificity, a process for producing an aliphatic alcohol alkylene oxide adduct as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to use a process for producing an aliphatic alcohol alkylene oxide adduct as recited by the instant claims because the teachings of '963 suggest a process for producing an aliphatic alcohol alkylene oxide adduct as recited by the instant claims.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 043,963 as applied to claims 9-13 above, and further in view of Renaudo et al (US 3,281,399).

'963 is relied upon as set forth above. However, '963 does not teach the use of an adsorbent or a filtering operation as recited by instant claim 14.

Art Unit: 1751

Renaudo et al teach removal of catalyst residues from polymers. In one aspect, the invention relates to a method for the removal of catalyst residues by combination of alkylene oxide and solid absorbent bed treatment of a polymer solution. See column 1, lines 5-20. Specifically, Renaudo et al teach a method in which a solution containing a catalyst was passed through an adsorbent bed containing 20 to 40 mesh activated clay. The treated solution was then cooled and the polymer separated by filtration. See column 7, lines 45-68.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use an adsorbent to remove the catalyst followed by a filtering step to separate the adsorbed catalyst from the polymer in the process taught by '963, with a reasonable expectation of success, because Renaudo et al teach a similar process for formulating polymers using a catalyst in which the catalyst is adsorbed followed by filtering and further, '963 teaches the use of catalysts in general which are separated from the resulting product.

Response to Arguments

With respect to '963, Applicant states that '043963 fails to disclose the catalyst (d) as now recited by instant claim 9. Furthermore, Applicant states that '963 does not disclose or even remotely suggest the narrow molecular weight distribution of the alkylene oxide adduct as recited by the instant claims. In response, note that, the Examiner asserts that the teaching of sulfuric acid or phosphoric acid by '963 would suggest salts of these acids as recited by the instant claims since one skilled in the art would have a reasonable expectation of success to use the salts of the acids in the

Art Unit: 1751

process taught by '963. Additionally, note that, the Examiner maintains that the teaching of '963 would suggest alkylene oxide surfactants having the same molecular weight distribution and same emulsification and detergency properties as the adducts recited by the instant claims because '963 teaches nonionic surfactants containing the same number of alkylene oxide units and same number of carbon atoms as recited by the instant claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

Art Unit: 1751

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gregory R. Del Cotto
Primary Examiner
Art Unit 1751

GRD
October 3, 2005